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Gregory J. Singerle JR.

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ALSTON & BIRD LLP

BANK OF AMERICA PLAZA

101 SOUTH TRYON STREET, SUITE 4000

CHARLOTTE, NC 28280-4000

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/808,166  
Filing Date: March 24, 2004  
Appellant(s): SINGERLE, GREGORY J.

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Andrew T. Spence  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed April 21, 2009 appealing from the Office action mailed October 30, 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**1. Claims 1-97 are rejected under 35 U.S.C. 102(b) as being anticipated by Gardner (Pub. No. 2002/0013904).**

2. With respect to claims 1, 9, 17, 25, 33, 42 and 51, Gardner discloses an apparatus, method and computer program product (paragraph [0025], lines 1-7) comprising:

a processor configured to send and receive (paragraph [0039]), to and from a client (paragraph [0029], line 4, *user*), a set of a plurality of labels identifying a respective plurality of elements of an authentication matrix (paragraph [0026], whereby the "label" is anticipated by Gardner's "grid references" in line 4, and the "elements of an authentication matrix" are anticipated by Gardner's "particular character"; note that Gardner's use of the terms "table" and "grid" throughout are, hereinafter, equated to the "matrix", see paragraph [0015], lines 3-7), the authentication matrix including a plurality of elements organized in one or more columns and rows each of which includes a respective header (paragraph [0055], lines 3-5), each element being identifiable by a label (paragraph [0027]) including a column header and row header that identifies the respective column and row of the element (paragraph [0055], lines 1-4), the set of labels including the column and row headers of the respective labels being unknown at the client until the set of labels is sent thereto (paragraphs [0061]-[0063], whereby the index

within each element [*M3D2D1M1= Month 3rd, Date 2nd, Date 1st, Month 2<sup>nd</sup>*] is unknown at the client prior to the user being prompted),

wherein the processor is configured to receive a passcode (paragraph [0026], whereby the “passcode” is anticipated by Gardner’s VPIN) from the client formulated based upon the elements identified by the received set of labels (paragraph [0027]), and wherein the processor is configured to authenticate the client based upon the formulated passcode (paragraph [0030]).

3. With respect to claims 2, 10, 18, 26, 34, 43 and 52, Gardner discloses the apparatus and method according to claims 1, 9, 17, 25, 33, 42, and 51 respectively, wherein the processor is configured to send a set of labels (paragraph [0061]), receive a formulated passcode (paragraph [0095], lines 1-5) and authenticate the client a plurality of times (paragraph [0096], lines 5-9), and wherein the processor is configured to send each set of labels such that the sent set of labels differs from each previously sent set of labels (paragraph [0025], lines 1-10, *the required VPIN input code, which varies on each and every occasion of use*).

4. With respect to claims 3, 11, 19, 27, 35, 44, and 53, Gardner discloses the apparatus and method according to claims 1, 9, 17, 26, 33, 42 and 51 respectively, wherein the processor is configured to generate a passcode based upon elements selected from the authentication matrix (paragraph [0026]), wherein the processor is configured to send a set of labels identifying the selected elements (paragraph [0061]),

and wherein the processor is configured to authenticate the client further based upon the generated passcode (paragraphs [0085-0086]).

5. With respect to claims 4, 12, 20, 28, 36, 45, and 54, Gardner discloses the apparatus and method and method according to claims 3, 11, 19, 27, 35, 44 and 53 respectively, wherein the processor is configured to provide, to the client, an authentication matrix stored in a database (paragraph [0046]), wherein the processor is configured to generate a passcode based upon elements selected from the authentication matrix stored in the database (paragraph [0085]), and wherein the processor is configured to receive a passcode formulated based upon elements of the authentication matrix provided to the client corresponding to the elements selected from the authentication matrix stored in the database (paragraphs [0045-0048]; Figure 2; paragraph [0086]).

6. With respect to claims 5, 13, 21, 29, 37, 46 and 55, Gardner discloses the apparatus and method according to claims 4, 12, 20, 28, 36, 45, and 54 respectively, wherein the database is configured to store a plurality of authentication matrices (paragraphs [0049]-[0050]), each authentication matrix associated with a different client (paragraphs [0049]-[0050]), wherein the processor is configured to provide, to the client being authenticated, an authentication matrix associated with the respective client (paragraphs [0049]-[0050]), and wherein the processor is configured to generate a

passcode based upon elements selected from the authentication matrix stored in the database and associated with the respective client (paragraph [0038]).

7. With respect to claims 6, 14, 22, 30, 38, 47 and 56, Gardner discloses the apparatus and method according to claims 5, 13, 21, 29, 37, 46 and 55 respectively, wherein the processor is configured to receive at least one piece of identifying information associated with the client being authenticated (paragraph [0038], lines 1-4), and thereafter identify, from the plurality of authentication matrices stored in the database, the authentication matrix associated with the client being authenticated based upon the at least one piece of identifying information (paragraph [0038], lines 1-4), and wherein the processor is configured to generate a passcode based upon elements selected from the identified authentication matrix (paragraphs [0061]-[0062]).

8. With respect to claims 7, 15, 23, 31, 40, 49, and 58, Gardner discloses the apparatus and method according to claims 3, 11, 19, 27, 36, 45 and 54 respectively, the processor is configured to generate a passcode further based upon a personal identification number (PIN) associated with the client (paragraph [0042], lines 1-3), and wherein the processor is configured to receive a passcode formulated further based upon the PIN (paragraph [0027]).

9. With respect to claims 8, 16, 24, 32, 41, 50 and 59, Gardner discloses the apparatus and method according to claims 7, 15, 23, 31, 40, 49 and 58 respectively,

wherein the processor is configured to generate a passcode including elements selected from the authentication matrix and the PIN in a variable position with respect to the selected at least one element (paragraph [0061]), wherein the processor being configured to receive a passcode formulated to include the identified elements and the PIN in the variable position with respect to the identified elements, and wherein the processor is configured to authenticate the client by identifying a match between the generated passcode and the formulated passcode (paragraphs [00070], [0074], and [0086]).

10. With respect to claim 60, Gardner discloses the apparatus according to Claim 1, wherein the processor is configured to send a set of labels to the client in response to the client effectuating logging in, logging in including prompting the client for at least one piece of identifying information (paragraph [0041]), and receiving the at least one piece of identifying information from the client, the at least one piece of identifying information comprising a user name and a password (paragraph [0042]) associated with a client user.

11. With respect to claim 61, Gardner discloses the apparatus according to Claim 6, wherein the at least one piece of identifying information received by the processor is capable of identifying the client to an organization independent of the authentication matrix associated with the client (paragraph [0097]; wherein an "organization" is anticipated by a Trusted Third Party acting as an administrator of the prior art system).



12. With respect to claim 62, Gardner discloses the apparatus according to Claim 9, wherein the processor is configured to receive a set of labels in response to the apparatus or user effectuating logging in, logging in including the apparatus or user being prompted for at least one piece of identifying information, and sending the at least one piece of identifying information, the at least one piece of identifying information comprising a user name and a password associated with a client user (paragraphs [0041-0042]).

13. With respect to claim 63, Gardner discloses the apparatus according to Claim 14, wherein the at least one piece of identifying information sent by the processor is capable of identifying the apparatus or user to an organization independent of the authentication matrix associated with the respective apparatus or user (paragraph [0097]; wherein an "organization" is anticipated by a Trusted Third Party acting as an administrator of the prior art system).

14. With respect to claim 64, Gardner discloses the method according to Claim 17, wherein sending a set of labels comprises sending a set of labels in response to effectuating logging in, logging in including prompting the client for at least one piece of identifying information, and receiving the at least one piece of identifying information, the at least one piece of identifying information comprising a user name and password associated with a client user (paragraphs [0041-0042]).

15. With respect to claim 65, Gardner discloses the method of Claim 22, wherein receiving the at least one piece of identifying information comprises receiving at least one piece of identifying information capable of identifying the client to an organization independent of the authentication matrix associated with the client (paragraph [0097]; wherein an "organization" is anticipated by a Trusted Third Party acting as an administrator of the prior art system).

16. With respect to claim 66, Gardner discloses the computer program product according to Claim 25, wherein the first executable portion is configured to send a set of labels in response to effectuating logging in, logging In including prompting the client for at least one piece if identifying information, and receiving the at least one piece of identifying information, the at least one piece of identifying information comprising a user name and a password associated with a client user (paragraphs [0041-0042]).

17. With respect to claim 67, Gardner discloses the computer program product according to Claim 30, wherein the at least one piece of identifying information comprises received by the sixth executable portion is capable of identifying the client to an organization independent of the authentication matrix associated with the client (paragraph [0097]; wherein an "organization" is anticipated by a Trusted Third Party acting as an administrator of the prior art system).

18. With respect to claim 68, Gardner discloses the apparatus according to Claim 33, wherein the processor is configured to send a set of labels in response to effectuating logging in, logging in including prompting the client for at least one piece of identifying information, and receiving the at least one piece of identifying information, the at least one piece of identifying information comprising a user name and password associated with a client user (paragraphs [0041-0042]).

19. With respect to claim 69, Gardner discloses the apparatus according to Claim 39, wherein the at least one piece of identifying information received by the processor is capable of identifying the client to an organization independent of the authentication matrix associated with the client (paragraph [0097]; wherein an "organization" is anticipated by a Trusted Third Party acting as an administrator of the prior art system).

20. With respect to claim 70, Gardner discloses the apparatus according to Claim 42, wherein the processor is configured to receive a set of labels in response to effectuating logging in, logging in including the apparatus or user being prompted for at least one piece of identifying information, and sending the at least one piece of identifying information, the at least one piece of identifying information comprising a user name and password associated with the user (paragraphs [0041-0042]).

21. With respect to claim 71, Gardner discloses the apparatus according to Claim 48, wherein the at least one piece of identifying information sent by the processor is

capable of identifying the apparatus or user to an organization independent of the authentication matrix associated with the apparatus or user (paragraph [0097]; wherein an "organization" is anticipated by a Trusted Third Party acting as an administrator of the prior art system).

22. With respect to claim 72, Gardner discloses the method according to Claim 51, wherein sending a set of labels in response to effectuating logging in, logging in including prompting the client for at least one piece of identifying information, and receiving the at least one piece of identifying information, the at least one piece of identifying information comprising a user name and password associated with a client user (paragraphs [0041-0042]).

23. With respect to claim 73, Gardner discloses the system according to Claim 57, wherein receiving the at least one piece of identifying information comprises receiving at least one piece of identifying information capable of identifying the client to an organization independent of the authentication matrix associated with the client (paragraph [0097]; wherein an "organization" is anticipated by a Trusted Third Party acting as an administrator of the prior art system).

24. With respect to claims 74, 82, and 90, Gardner discloses the apparatus, method, and computer program for authenticating a user (paragraph [0025], lines 1-7) comprising:

a processor (paragraph [0025], lines 1-3, *Master System*) configured to prompt a user (paragraph [0025], lines 1-3) for at least one piece of identifying information associated with the user (paragraph [0051]), the user being prompted during effectuation of logging in (paragraphs [0041-0042]),

wherein the processor is configured to receive the identifying information in response to prompting the user (paragraph [0040], *be approached by the master system*), wherein the processor receiving the identifying information invokes an authentication procedure (paragraph [0025], lines 1-7), the authentication procedure comprising:

selecting a set of labels identifying respective elements of an authentication matrix (paragraph [0027], *grid reference system*), wherein the authentication matrix includes a plurality of elements organized in one or more columns and rows each of which includes a respective header (paragraph [0055], lines 1-5), each element being identifiable by a label including a column header and row header that identifies the respective column and row of the element (paragraph [0026], whereby the "label" is anticipated by Gardner's "grid references" in line 4, and the "element of an authentication matrix" is anticipated by Gardner's "particular character");

providing the selected set of labels to the use, the set of selected labels including the column headers and row headers of the respective labels being unknown to the user until the set is provided (paragraphs [0061]-[0063], whereby

the index within each element [**M3D2D1M1**= Month **3rd**, Date **2nd**, Date

**1st**, Month **2<sup>nd</sup>**] is unknown at the client prior to the user being prompted);

receiving a passcode from the user in response to providing the set of labels (paragraph [0026]), the passcode having been formulated based upon the elements identified by the provided set of labels (paragraph [0027]); and

authenticating the user based upon the received passcode (paragraph [0086]).

25. With respect to claims 75, 83, and 91, Gardner discloses the apparatus, method, and computer program according to claims 74, 82, and 90 respectively, wherein the entity is capable of prompting the user and receiving the identifying information for each of a plurality of instances of logging in, and wherein the entity receiving of the identifying information for each instance invoked the authentication procedure such that the set of labels provided for the respective instance differs between the set of labels provided for each previous instance (paragraph [0025], lines 1-7).

26. With respect to claims 76, 84, and 92, Gardner discloses the apparatus, method, and computer program according to claims 75, 83, and 91 respectively, wherein the entity receiving of the identifying information of each instance invokes the authentication procedure such that the received passcode is unique to the respective instances (paragraph [0025], lines 1-7).

27. With respect to claims 77, 85, and 93, Gardner discloses the apparatus, method, and computer program according to claims 74, 82, and 90 respectively, wherein the entity is capable of receiving at least one piece of identifying information such that the authentication procedure further comprises: identifying, from a plurality of authentication matrices, the authentication matrix associated with the client being authenticated based upon the at least one piece of identifying information, the selected set of labels identifying elements of the identified authentication matrix (paragraph [101]).

28. With respect to claims 78, 86, and 94, Gardner discloses the apparatus, method, and computer program according to claims 77, 85, and 93 respectively, wherein the at least one piece of identifying information received by the entity is capable of identifying the client to an organization independent of the authentication matrix (paragraph [0097]; wherein an "organization" is anticipated by a Trusted Third Party acting as an administrator of the prior art system).

29. With respect to claims 79, 87, and 95, Gardner discloses the apparatus, method, and computer program according to claims 74, 82, and 90 respectively, wherein the entity is capable of receiving at least one piece of identifying information such that the authentication procedure includes receiving a passcode having been formulated further based upon a personal identification number (PIN) associated with the client (paragraph [0027]).

30. With respect to claims 80, 88, and 96, Gardner discloses the apparatus, method, and computer program according to claims 79, 87, and 95 respectively, wherein the entity is capable of receiving at least one piece of identifying information such that the authentication procedure includes receiving a passcode having been formulated including at least one element selected from the authentication matrix and the PIN in a predefined position with respect to the selected at least one element (paragraph [0070]).

31. With respect to claims 81, 89, and 97, Gardner discloses the apparatus, method, and computer program according to claims 74, 82, and 90 respectively, wherein the identifying information received by the entity comprises a user name and password associated with the user (paragraphs [0041-0042]).

#### **(10) Response to Argument**

32. With respect to claim 1, the applicant argues that Gardner does not teach or suggest an apparatus for authenticating a client in which *a set of labels including column and row headers identifying columns and rows of a matrix including elements from which a passcode is formulated are unknown at the client until that set is sent to the client*. The applicant further argues that in every embodiment of Gardner, the user knows upfront the grid references from which the VPIN is derived. It is Gardner's VPIN which anticipated the applicant's *passcode*.



The examiner respectfully disagrees with the applicants arguments. While the Applicant is correct in their interpretation of Gardner's "grid references may relate to such things as Weekday, the Date, the Month the Use number for that day, the Time of day to the last complete hour, or indeed any other method of precisely indicating which grid reference applies to a particular a specific use" as potentially allowing the user to have knowledge of certain column/row headers, that does not preclude Gardner from withholding column and row headers from the user until they are sent. The column and row headers which are unknown to the user are disclosed by Gardner in an example VPIN in paragraph [0062], where Gardner reference a nested column header in order to produce the proper VPIN, **M3D2D1M1= Month 3rd, Date 2nd, Date 1st, Month 2nd**. Here the nested column header, which for the first digit of the VPIN is the third column of the Month element "**489**", is unknown to the user until being prompted. The Month element, in this example, "**489**", can be viewed as an indication of the row of the matrix, which is nested within the Calendar matrix of Gardner.

33. With respect to claims 2-97, for the above reason, the claims stand rejected.

34. With respect to claim 74, the applicant argues that Gardner does not disclose *prompting a user for identifying information during effectuation of logging in, wherein receipt of the identifying information invokes the authentication procedure.*

The examiner respectfully disagrees with the applicants arguments. Gardner clearly discloses an embodiment in which the interactive method of the authentication procedure is implemented subsequent to user being prompted for identification information, specifically Gardner's embodiment allows for the user to enter an account number (paragraph [0083]). Following the user's response to the prompt for their account number, Gardner's disclosure transitions from Figure 5A to 5B, wherein the User Interface 28 then prompts the user for their VPIN, and thus authenticates the user based on their identification information provided at the outset (paragraph [0083], Figures 5A & 5B).

35. With respect to claims 75-97, for the above reason, the claims stand rejected.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

6/1/09

/Rubin Blake/

Examiner, Art Unit 2457

Art Unit: 2457

Conferees:

/ARIO ETIENNE/

Supervisory Patent Examiner, Art Unit 2457

/Salad Abdullahi/

Primary Examiner, Art Unit 2457